

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/648,610	WILHELM, DIANA JOAN	
	<b>Examiner</b>	<b>Art Unit</b>	
	Min Jung	2663	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed 2-1-05.
2. ☒ The allowed claim(s) is/are 1-21, and 23-51 (renumbered as 1-50).
3. ☒ The drawings filed on 28 August 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input type="checkbox"/> Other _____   |

## REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: All the claims are allowable over the prior art of record because prior art fails to teach or fairly suggest i) a method and a system for setting up a connection through a connection-oriented network between a sink node and a multicast tree, the multicast tree being coupled to the connection-oriented network via an ingress node, and the sink node being coupled to the connection-oriented network via an access module, the method comprising the steps of identifying the access module through which the sink node is coupled to the connection-oriented network; sending a message to the access module requesting that the sink node be connected to the multicast tree; grafting a leaf to the multicast tree at the access module to connect the sink node to the multicast tree; and merging multicast packets into an existing service connection for the sink node, ii) an Internet Protocol Service Gateway adapted to reduce duplication of multicast traffic through a connection oriented network, the IPS GWY comprising means to perform the functions recited above, iii) an access module for a connection oriented network adapted to enable grafting of a connection between a sink node and a multicast tree, the access module being coupled to the connection oriented network and the sink node, the access module comprising means for grafting a leaf to the multicast tree to connect the sink node to the multicast tree, and the access module comprises any one of a digital subscriber line access multiplexer; cable headend; wireless headend; satellite base station; network side of customer premise equipment; and optical line termination, and iv) a method of

providing multicast service delivery to an end-user of connection oriented access services served by an access module connected to a connection oriented network, comprising the steps of : setting up a separate connection between an access module serving a plurality of the end-users and gateway for delivering multicast packets from a source network, to permit the multicast packets to be transferred across the connection oriented network independently of any end-user virtual channel supported by the access module; and merging the multicast packets with other Internet Protocol traffic on the end-user VC at the access module, to deliver the multicast packets to the end-user. Note, that the term "connection oriented network" recited in the claims is understood and interpreted to be referring to ATM network described in the specification since ATM the only type of connection oriented network described in the specification.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


2 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Min Jung whose telephone number is 571-272-3127. The examiner can normally be reached on Monday, Thursday, Friday 7:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2663

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJ  
March 7, 2005



Min Jung  
Primary Examiner